

ORPHANED COMPUTERS & GAME SYSTEMS

Volume II, Issue 4 June 1998

While working on this issue, I made a shocking observation. I purchased a cartridge for my Commodore 128 that lets it use modern modem speeds. The whole point is to download software that will be fun and useful to me. This is where the shocking observation comes in. Almost all of the software I find on the Internet is for use with emulators. Don't get me wrong; I like emulators. No, I *love* emulators! But I feel like I'm the only one using the actual Commodore 64 hardware anymore. Isn't there anyone out there willing to admit that they use the hardware itself? You know, hardware? That metal and plastic stuff that takes up room on your desk rather than on your hard disk?

I have been spending too much time with my Bally Astrocade lately, totally neglecting all of my other systems. I don't need a new computer to enjoy computing. I can just go to a local thrift store and pick up a computer for a couple of dollars that will give me unlimited fun. The fun doesn't stop, either; I just move on to other machines that are equally as fun for an equally small amount of cash.

Getting attached to one system is unavoidable; I prefer the Atari VCS and Atari 8-bits. Using only one system all the time would bore me to tears. I have to use a few different computers daily or I'd go mad. I'm lucky; I work with different types of computers at work --

IBM mainframes, UNIX boxes, and many different operating systems. But I love to come home, plug a cart into one of my trusty classic consoles and play until I get *Space Invaders* Wrist. It sure beats playing the latest beat-'em-up with my four-year-old son -- and losing! -- AT

Hey everyone! Well, between last ish and this one, we finally completed a nicely organized Website. It's a mirror of this paper treat, but it's not in the nifty columns-and-boxes format in which you're currently indulging. In addition to all OC&GS issues, there's a two-part feature there that takes you on a detailed tour of the world in the classic *Zork* trilogy. It was far too long for an actual issue, so I put links to that feature on our page.

If you wanna visit us online, enter this magic, fantastic message into your URL box: <http://w3.tvi.cc.nm.us/~atrionfo>

Y'know, you run into a lot of nice folks who share this hobby. It's like their penchant for old games has somehow spilled over into their demeanors, indicating the etiquette and good manners of yesteryear. First, thanks very much to Joe Santulli, the Editor-In-Chief of *Digital Press*. He was kind enough to put a link to our Website on the DP page. We don't have a page of links yet, so I'll just have to plug 'em right here (like they need it). Visit *Digital Press* at <http://www.digitpress.com/> and feast on their banquet of gaming expertise. I'd

also like to highly recommend their *Classic Videogames Collector's Guide, 4th Edition*. Their page contains all of the info you need to order it.

Also, thank you, James Austin! He's a reader from Kent, England who was kind enough to send us an installment of the UK magazine *New Atari User*, wherein there sits a big ol' blurb about our nummy newsletter and where to get it. So obviously I'd also like to express sincere appreciation to Les Ellingham, the curator of that fantastic folio. Get a bimonthly, one-year subscription by sending 23 pounds (it's about 40 American smackers -- ask the Post Office), or 42 pounds for a disk subscription (both of these prices include shipping), to Page 6 Publishing, PO Box 54, Stafford, Staffordshire, ST16 1DR, England. It will be worth your while, Atari fans! -- CF

By the way, The World Of Atari show is on August 21-23 in Las Vegas, Nevada. Chris and I will be there; will you? You really should think about attending if you aren't going already. Can you call yourself an Atari fan if you don't go? Besides, how are Chris and I going to meet you if you aren't there? For more information about the show, visit the excellent Website at <http://atarihq.com/atari98/> and you'll get all of the information you'll need. -- AT

Reprint of Volume II, Issue 4

This issue of OC&GS may be downloaded, in PDF or text format, from:

<http://w3.tvi.cc.nm.us/~atrionfo>

ORPHANED COMPUTERS & GAME SYSTEMS

4321 Montgomery NE, #339
Albuquerque, NM 87109

Founder/Writer/Editor

Adam Trionfo
(505) 875-1526
adam@thuntek.net

Writer/Editor

Chris Federico
chris@abq.com

Visit us online:

<http://w3.tvi.cc.nm.us/~atrionfo>

OC&GS is published bi-monthly. The newsletter is typeset on an Amiga 2500 and an Amiga 3000 using Pagemaster v2.2.

All games, titles, characters, and other trademarks or related items are the properties of their respective holders, and are in no way related to or part of this publication.

Want another issue?

One more costs a measley dollar.

Give this to your friends! Spread the word! We appreciate your help!

If you would like to exchange your 'zine or newsletter, send it! We'll send the next OC&GS!

If you received this issue free, think about sending a buck for the next one. Suggestions are always welcome. What subjects would you like covered?

If you want to contribute, send us some stuff or e-mail text files to us. We love having other writers.

THE OC&GS FORUM

LETTERS AND MAYBE SOME REPLIES

Adam,

I wanted you to know that I got the issues I asked for.

Hey, I have to say that I'm one of those "wanna write a game" procrastinators. I've subscribed to the *Stella 2600 Programming* mailing list, I have some tools on the *Stella CD*, I have a bunch of books on 6502 programming and I even have some 2600-related programming notes. Saying "I don't have the time" may very well be an excuse, but I'm sticking to it for now.

Russ Perry, Jr.

Arlington Hts., IL

(Senior Editor of *Digital Press* and co-compiler of the *Stella Gets a New Brain* CD-ROM, a collection of Starpath games for the 2600 Supercharger)

Hope you find the time someday! It'd be interesting to see what sorts of games a die-hard collector and committed Supercharger gourmet such as yourself would come up with for that dear old machine.

Dear Adam,

As to what the classic gaming scene is like in England, I don't think we have one as such! Here in the UK, you have those people who have hung onto their "old" systems such as the Atari 8-bit and Commodore, and who play the classic games all the time; but those owning the "superior" PCs/Amigas seem not to bother with "classic" stuff... Nobody I know at school collects or plays them as a hobby, or knows anybody who does. Obviously, it's not as big a thing in the United Kingdom as it

seems to be across the Atlantic.

James Austin
Kent, England

Maybe there's not as much difference between our two countries as one would think. There are a lot of people here like that, too; they don't want to know about anything that came out prior to their precious Myst or Wing Commander. Man, what they're missing out on! Hey, by the way, thanks for the copy of the UK Atari magazine with the mention of our newsletter in it!

Hi!

I'm sick of old fuddies droning on about their pristine labels and boxes. They never talk about how much fun a game is. That's why I've labeled myself an enthusiast, not a collector.

I believe you've said that you have some [rare] Commodore equipment. Have you heard of *Playbin 25*? It's a coding program for the 64 that works with a SuperCharger to write [2600] games. I have both, but I haven't messed with the program much. I'll be happy to do an article on it if you want.

Anthony Memmer
Indianapolis, IN

That would be VERY COOL. We know that Playbin 25 exists, but not how it works or what sort of coding environment it offers. If you ever feel like hauling that thing out and learning about it, we'd love to receive an article! By the way, thanks for going to the trouble of drawing those nifty Pac-Man decorations on your letter! You know how to have fun, fellow ENTHUSIAST! (We don't care about labels either.)

○Behind The○ Pioneers' Eyes

Where Some Ideas For Classic
Games Came From
by Chris Federico

I don't know about y'all, but I think it's cool to read about how the designers of yesterday hit upon their game themes. It's funny -- newer titles wouldn't be as interesting to hear about. Writing a game in the '80s was more like writing a book. There had to have been an impetus for each idea, an implementation into a reasonable game format, and the actual coding that those guys undertook to see their ideas through and create their worlds. Nowadays, quoting the head graphics designer assigned to a game project, for instance, would be boring in comparison:

"Yeah, so I saw this cool picture, and I thought it would be neat to make that the scenery of one of the rooms in the game. So I took a picture with my digital camera, put in on a Zip disk, did some touch-up work on the shading, and voila!"

Nope.

Video games break my no-nostalgia rule. I usually hate the idea of finding things from the past better than the present. It's a sign of pessimism to me. But in the context of games, with a half-handful of exceptions, the older ones were more interesting and more fun on many levels. One way in which they're more intriguing is from the standpoint of design. So here's a look at the germination of some beloved old contests from the creators' perspectives.

The April, 1983 issue of *Electronic Fun With Computers*

and *Games* featured an interview with Garry Kitchen, one of Activision's most renowned creative minds. Besides pointing out that his brothers, Steve and Dan Kitchen, also worked for Activision, the article fills the reader in on many nifty details, among them the fact that Garry did 2600 *Donkey Kong* and Steve did 2600 *Carnival*, both for Coleco, as extra work. So apparently, Activision didn't have a policy similar to Atari's that prevented designers from moonlighting.

The interview centers around *Keystone Kapers*, the multi-screen 2600 platform game that ranked among the hottest titles in Activision's old catalogue. The interview was conducted just before the game was released, so Garry wasn't sure how well it would sell yet. *Electronic Fun* asked him how the game came about.

"I was going to do a game with a cop chasing a crook," he replied. "The Keystone Kop was my wife's idea. The cop chases the crook through a department store... I had a great police car in the game at one point, called the Paddy Wagon. I had to take it out because it didn't fit in with the game play at all." If only more programmers subscribed to this ethic!

He went on to explain other elements that didn't make it into the game. "At one point, there was a TV set. I took that out because it didn't make sense -- the Keystone Kops were around before there was a television. I had a bomb in there too, but it wasn't very important to the game, so I got rid of it."

Garry also elaborated on what it was like to work at Activision. "I called up Dan and said, 'Look, I want an object you can duck under.' He thought about it and suggested an airplane, and I put it in. I do it

with the other guys at the Activision Eastern Design Center too. I'll be working on something, and I'll say to the other guys, 'What do you think of this color? Is it weird?' There's a lot of teamwork."

By including a full expose' about the development of *Crystal Castles*, the March/April, 1984 issue of *Atari Age* hinted at the excitement Atari felt about that coin-op when it first hit the streets. Scott Fuller, the game's project leader, elaborated on its inception and the way it wound up in its final form. Evidently, it started out as an *Asteroids* variant. The screen featured a topographical landscape of valleys and hills, angled for a 3-D perspective that the player had to somehow guide his ship around. The ever-present rocks fell from the sky instead of floating around. It was called *Toporoids*.

Fuller informed *Atari Age* that the main reason the idea was dropped was the less-than-awesome title. But Scott and the team liked the topography idea, so that was reworked into the now-familiar series of castle-based mazes and corridors. The falling rocks turned into a series of weird bad guys that initially fell from the sky but then chased the hero, Bentley Bear, around the angled, isometric mazes as he collected gems to pass levels and see new landscapes. The game didn't do too well when it was initially tested in selected arcades; the pretty graphics lured people over to the machine, but the game was too hard. It was reworked a bit, and then sent out in the form we know.

The popular designs from the potent mind of David Crane were explained by Colin Covert in a long interview he conducted

with Crane for the January, 1984 issue of *Hi-Res*. "Crane, who's known as a graphics virtuoso, begins by creating visual images, and then building a game around them." It's not hard to imagine how *Pitfall*, and especially its first sequel, came about this way. "Sometimes a premise occurs to him like lightning striking the primordial soup, and the game evolves smoothly. More often, Crane says, designing video games is a process of eliminating every idea that doesn't fit."

Crane himself spoke about driving to a trade show in Chicago. He evidently saw a guy dodging cars in an attempt to get across Lake Shore Drive. "But for how to hook everything up, the idea was there in ten minutes," he told Covert. "That was fun. The rest was just hard work." The work resulted, of course, in the *Freeway* cart.

Crane made technical advances along with the imaginative ones. "I often start a game by coming up with a new way to fool the machine, and seeing what kind of game it will become. *Grand Prix* is an example. It was unthinkable before that to make a car the shape and color of those." Activision designers were known as code-crunching adepts anyway; it was one of the reasons their games shined. "People were telling me there was no way to pack that much information into the limited amount of memory space we had available. So I did. So there!"

Activision was its own test-playing team: "If it's fun for half-a-dozen video game designers to play, it's a good game," Crane elaborated.

The January, 1983 issue of *Video Games* featured an interview with Bill Grubb and Dennis Koble, the two ex-Atari

guys who started Imagic. Koble, who created *Atlantis*, explained the tiny spaceship that flies away at the game-over point.

"I can remember the day in the lab when me and Rob decided to tie the two games together. He was working on *Reaction*, a shoot-'em-up-type game that was the precursor to *Cosmic Ark*, and we started kicking around the idea of the survivors from *Atlantis* showing up in *Cosmic Ark* with the mission to go from planet to planet, getting two of every creature from these various planets to repopulate Atlantis. We just thought it would be neat." The little ship escaping at the end of *Cosmic Ark* isn't explained; maybe there was a third tie-in in the works that never happened.

Doug Neubauer designed *Star Raiders* for the Atari 8-bit; few folks realize that the same guy designed the POKEY, the chip inside the Atari 400/800 that handles sound, controller reading, keyboard reading, random number generation and serial communication to peripherals. In October of 1986, he told Lee Pappas of *Analog Computing* that the 800 was "originally planned to [have] the same audio as on the 2600." Pappas asked him what the inspiration for his famous game was.

"*Star Raiders* was to be a 3-D version of the *Star Trek* game played on the mainframe computers of that time. The *Star Trek* game was all text and not played in real time, but it had the idea of ship damage and sector scanners and charts. It also used names like 'Commander' or 'Super Commander,' which gave me the idea of a rating rather than a score."

Before working at Atari, Neubauer had been at National Semiconductor. "While at

National, I did up some demo screens of star backgrounds, and the whole thing seemed feasible. But I didn't get to implement it until a couple of years later."

There were no games for the 400/800 when Neubauer started working on the game in early 1979. The interviewer explained that a lot of *Analog Computing's* readers had bought their 8-bits just to get *Star Raiders*. "It's pretty amazing, the way the game caught on," said Neubauer. "I think it was the first game to combine action with a strategy screen, and luckily, the concept worked out pretty well. I guess the part I liked best was the [enemy ship] explosion; I never was really satisfied with the hyperwarp display."

Pappas got him to talk about the actual coding of the game. "The routines in *Star Raiders* are total hacks!" Neubauer revealed. "It was the first game to use 3-D algorithms, and the ones I came up with were terrible. They worked, but were slow. That's why the game slows down when there's an explosion. The explosion consists of about 64 separate pieces, and moving them around in 3-D space took a lot of computation time."

Pappas asked him what he could have done with *Star Raiders* if there had been more than 8K available. "It would be interesting to try and get a planet-landing sequence, where you start from space and approach the planet, and as it gets bigger, more detail appears."

He went on to design the incredible *Solaris* for the 2600, of course; but *Star Raiders* is the daddy of windshield shooters. Can you imagine some guy designing a revolutionary microchip *and* a revolutionary game in the climate of the industry in the '90s?

Me either.

-- CF

Lost In Time

The Commodore Vic-20 By Adam Trionfo

Lost in Time will be a running feature. It covers home computers that never quite made the limelight like, say, the Commodore 64 or Atari 8-bit machines did. Some may have been popular for a short period of time, but most were not. Some of the topics that will be discussed are hardware, commercial and public domain software, periodicals and books. Future columns will include the Commodore Plus/4 and 16 as well as closer looks at the Coleco ADAM and Bally Astrocade. This month's focus is on the bestselling computer of 1981: the Commodore Vic-20.

The Vic-20 computer was the first Commodore product I ever wanted to own. My lust for the \$99 TI-99/4a gave way to the Vic in 1983, when a student in my sixth-grade class brought in a Vic-20 as part of a science project he was working on for that machine. I saved money for over a year. In the end, I passed it up in favor of the much more powerful big brother that Commodore followed-up with: the 64.

I never regretted purchasing the 64, even when some of my other friends were bragging about the computers that they had, like the Vic-20, Atari 800 and Coleco ADAM. In hindsight, the Commodore 64 was the best choice I could have made. I wondered recently about the Vic that I never had. Had I missed out on anything?

I've had a Vic-20 for several

years now, but I haven't bothered with it much. But whenever I come across something I don't have in my collection, I usually pick it up (the exception being Odyssey 2 stuff). I have at least sixty different cartridges for the Vic-20 now, along with countless other items that are quite interesting, among the neatest of which is an 80-column board for use with word-processing software.

Chris has asked me on several occasions about the AtariSoft products I have for the Vic. I thought it was about time I took a closer look at the system that I passed up in my youth.

The Vic-20 was first released in September of 1980 in Japan. About six months later, it was released in the U.S. for \$299. The price was a breakthrough. Commodore had been worried that the Japanese were going to take over the home computer market. As a solution, they believed that a low-cost computer using their VIC display chip would be a strategy that would ensure that the market wasn't cornered by the East. Other companies had decided that a computer with a 22-column screen, the maximum that the VIC chip could display, was unmarketable. Commodore thought otherwise.

The computer that they ended up with was, of course, the Vic-20. With eight colors, high-resolution bitmapped graphics (176x184), sound and a typewriter-style keyboard, the Vic-20 was a worthy...game machine. Despite the ads and excited talk in the magazines, out of the box it was not up to word processing or telecommunications. For example, *Hes Writer*, a simple word processor, only allowed about 100 lines of text to be typed before memory ran out. The line limit works out to about 25 80-column lines; not

even half a page.

The unexpanded (standard) Vic-20 only had 5K, of which only about 3.5K could be used from BASIC. Even the Atari 400, with its membrane keyboard, came with 16K. But the standard Vic is able to use a disk drive, which the Atari 400 can't do unless the memory is upgraded. Most Vic owners opted for the cheaper cassette drive anyway.

Despite the strikes that the Vic-20 had against it, it was still very popular. It really does make an excellent game machine, despite the fact that it has no sprite abilities. Programmers used redefined character sets to get around this. Companies released quite a number of impressive games on cartridge for the unexpanded Vic.

The Vic-20 might have lost support when the 64 was released had Commodore not made 64 hardware compatible with the Vic. Software for the Vic will not run on the 64, but most hardware devices will. This includes disk drives, modems, printers and joysticks. Commodore did this with all future machines to some extent.

I have used a 1581 3&1/2" drive with my Vic-20 and it works fine. The 1581 holds over 700K -- about 200 times the amount of standard Vic memory. This is equivalent in ratio to any recent PC clone with 32 megs of RAM getting upgraded with a 6-gig hard drive.

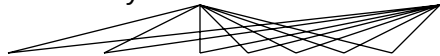
Currently I am not able to get software for my Vic-20 unless I type it in, which was quite acceptable in the early eighties but which I am unwilling to do anymore.

See about getting a Vic-20. They are full of potential and quite a bit of fun. (As long as you lose that miserable datasette drive!)

-- AT

CONNECTION

by Chris Federico



I'm sitting at the Amiga, typing this. Behind me sits Adam, facing a direction perpendicular to me and focusing on a different screen. And he's yelling at it.

Now, Adam is a rational, intelligent man. He's quite aware of how televisions work, and he knows that *Pitfall II*'s countless bats, frogs and condors are unreal cartoons, drawn and animated via a stream of 0s and 1s. He knows how the Atari 8-bit computer works. He knows that this is all make-pretend.

And yet I can hear him quite clearly: "**Son of a bitch!**" He's taking this to heart. He is, at this moment, Pitfall Harry. The vicarious experience transcends even the mania of a sports spectator; Adam's life, at this point, hinges on the movement pattern of a bobbing black bat.

He interjects a comment at this point: "Any game I curse at is either really good or really bad."

Since it's *Pitfall II*, of course, we know it's the former. I answer with a smart-ass "Oh, I forgot to tell you, the red button makes him jump." I get a couple of sardonic eyes in my direction as a response.

I'm guilty of the same emotional involvement. I must win. If I don't, I keep playing until I do. Because I am in the *Defender* ship, I occupy one of the *Missile Command* bases, and I, personally, explore the demonized corridors and chambers of *Doom*.

On that level of engrossment, where consciousness is nudged right up against the line dividing reality from fantasy, it's **not** make-

pretend. It's a real achievement. It's no viscerally different than climbing Mount Everest or making a touchdown. These electronic dreams and nightmares are what serious video game players measure their lives by, especially at the moments they're playing. Later in the day, Adam won't care about how well he did at *Pitfall II*. But at this point, he cares about nothing else.

Is it because Adam and I weren't athletic in high school? Are we video jocks, compensating for past sociological shortcomings? I mean, we both get chicks **now**; the fact that I eventually learned how to talk to people, and the musical things I've achieved, probably help in that area, and the fact that Adam has become a humorous person of wit and intelligence has definitely made him one of the coolest people in the world to hang out with. We both also finally got a few muscles and gained some altitude. But mainly, we can point to the former, less superficial qualities in determining any recent social success. (I also find it interesting that we've both grown out our hair.)

But think about it: You've just been through a day in the life of a sixth-grader. You were picked last for the football session in gym class, you got bullied by some big dork over a Hot-Wheels car of yours that he wanted (you didn't let him have it anyway -- ha), and you ate lunch alone or with a couple of nerds with Pocket Protectors who would **never** go on to join bands or attain entertaining personalities.

So you go home, turn on a machine, and indulge in a vista of fantasy that has recently captured your imagination and thrown your long-standing addiction to science fiction media into overdrive. And you play so often

and so well, because of your fascination with these other worlds, that you become King there. You are not an athletic fall-short; in fact, there's nobody better than you. You are a success, you get rewarded, and you get continually sucked in.

So later, in 1998, these things still mean something to you. These machines that plug your existence into other worlds still represent quite a lot. You may now be edging more toward "winner" status in real life than all those years ago, but equally as important is maintaining your royal accolade in this other dimension. None of the significance has been lost.

Winning *Pitfall II* will be an accomplishment for Adam. It will mean quite a bit to him. That's why he's yelling every time he doesn't make it up the ladder past the frog.

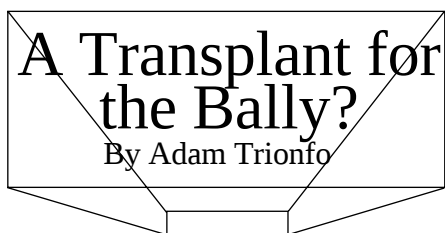
And I'll readily admit that fifteen minutes ago, I was sitting where he is now, shouting, "Son of a **whore!**"

Different wording, same part of the brain. -- CF

Do You Like Books About Video Games?

This is the one you're looking for. It's called *Worlds: The Final, Ultimate Classic Video Game History and Strategy Compilation*. It's everything the title implies and more. It's a work-in-progress, however; I've completed the introductory chapter and seven game chapters (covering one classic game apiece -- I've hit all of the essential, coin-op derived contests so far). It's currently up to about 100 pages. It's the most complete, accurate text ever written about video games.

Many more chapters are obviously coming. If you're interested, e-mail my ass at chris@abq.com and I'll send you some of the most comprehensive ASCII files you've ever received. -- CF



I have a Bally Astrocade system that has been sitting idle because of a lack of cartridges. I have some cassettes for it, but I have never been able to get any of them to load with success. The *Stella Gets a New Brain* CD-ROM compilation has inspired me to try my hand at converting some cassettes that I have for the *Bally BASIC* cartridge into wave files.

Cartridges are the primary media for collectors, but they are just a small fraction of the software that is available for the Astrocade. There is a great wealth of public domain software that few people have used because it is so difficult to find. This software was distributed on cassette for use with the BASIC cartridge.

Both versions of the *Bally BASIC* cartridge load programs only from cassette into the 1.7k of available memory. The original version of *Bally BASIC* loads software at 300 baud. The newer version, the one with which most people are familiar, loads software at 2000 baud. But loading software from cassette is not very reliable. Many of the problems stem from the media itself: used cassettes. They have a limited lifespan, during which time they begin to deteriorate, until, finally, the data is no longer available for use.

If you have been lucky enough to find some cassettes for the BASIC cartridge and have tried to load them, then you know just how difficult it is to make them work. In order to load a program, the volume on the

cassette player must be adjusted until the cartridge is able to communicate with it. It can be a very frustrating task. With enough patience, a program or two may get loaded, but it is a rare event. The worst part is that the same program that loaded fine yesterday does not load today. This is the same problem that I was having. I figured that there had to be a way around it. I finally reached a solution.

As stated at the beginning of this article, I was inspired by *Stella Gets a New Brain*. I wanted to make the audio cassettes of software that I have for *Bally BASIC* more reliable. I used the Windows '95 sound recorder and the Shareware version of *Cool Edit '96* to create wave files that could be loaded into the BASIC cartridge. After the wave files were created, I was able to load them much easier, using very few volume adjustments.

I have been able to convert to wave format programs that I was never able to load from cassette before. Saved from the perils of oxidization are eight programs, included on four different cassettes. They are now stored digitally on my hard drive, safe from the death threatened by the slow deterioration of tape.

These eight programs are just the beginning of what is available. I have also converted about twelve public domain programs that originally appeared in the newsletter *The Arcadian*. Some of these are very simple. *Inverse*, for example, just has the player reversing the order of a group of numbers. Shallow by today's standards; they would probably not hold my attention for more than a few minutes. However, they provide an excellent view of the state of games in the late seventies and early eighties.

The history of home video

games can be gleaned from early computers and consoles. But the Bally Astrocade is unique because the users were the primary force behind it. They breathed life into the Astrocade for years after it was left on its own by Bally and later picked up by Astrovision. The cartridges make great games, but it is the selection of games written in BASIC and the fact that users could tinker with the hardware that makes this system such an important piece of history. Keeping this history around through the use of wave files is very important. Because I have little knowledge of how to manipulate sound samples, I do not know where to begin in cleaning these wave files up. For example, I would like to get rid of some of the background noise. If anyone can give me some pointers, such as suggesting software that works well for sound editing, let me know.

After reading this article, you may want a Bally machine. However, the Astrocade is a difficult system to acquire. If you so desire, one can be obtained from classic dealers or individuals on the Internet. A look on most of the search engines on the Web will bear fruitful results. Before long, you will be able to play *The Incredible Wizard* with the best of us!

Wouldn't it be great to have a collection for the Bally that is similar to *Stella Gets a New Brain*? I think the Bally needs a brain transplant too!

This is a subject that I find very fascinating. It deserves much more attention, and shall receive it in a follow-up article which will appear in the next issue.

Visit the OC&GS Website for a future link to a page that will be dedicated to Bally Astrocade software. -- AT

8-Bits On the Internet

By Adam Trionfo

I am unable to use many of the computer systems that I have because I own little or no software for them. There is a free source of public domain software available for many of these systems that is close at hand: the Internet. Most people access the Internet through a modern computer of some sort, using a GUI-type interface. This makes finding classic software easy. It makes downloading the software easy. But *using* the software is another story.

A lot of software originally written for popular classic computers can be downloaded and run on emulators on fast IBMs, Macs, Amigas or Ataris. But what if you don't want to use a newer PC? What if you want the programs to run on their actual machines? What if, like me, you have computers that never quite caught on in the popular computing circles of yesteryear? Unless you are blessed with a semi-modern set-up for one of these old machines, you will have to spend a little money to get them up to a standard that a PC can understand. Or you could choose the route that I did with my Commodore 64.

Recently, I had the urge to try some software on my Vic-20 (see the Vic-20 article in this issue). Since there are boatloads of Vic software available at many FTP sites, I figured I could use a 1200-baud modem with a communication program on my C-64 (the 64 uses the same disk

format as the Vic). As fate would have it, I had the worst terminal programs ever created for the 64. Two could only be used at 300 baud, and the other was able to connect to a local BBS at 1200, but it kept putting garbage on the screen (not related to non-ANSI compatibility). I was unable to get a better terminal program, of course, because I couldn't download. The solution was to shell out cash.

I got what I needed from Creative Micro Designs, a C-64 dealer (<http://www.cmdweb.com>). Here is what I purchased: a 64 terminal program called *NovaTerm 9.6*, which features an 80-column mode when used with a 128 in 64 mode; and a cartridge that features its own standard, fast, 9-pin serial port. With these two items, I am now able to connect to the Internet via a shell account at 56,000 baud! I am able to use e-mail and the Web with two *Unix* favorites: *Pine* and *Lynx*. My 64 has new life. It enables a greedy person such as myself to get all the software I could ever imagine!

This exercise in insanity can be used as an example for just about any classic computer. Any box can get online with enough initiative. An issue of *The Arcadian*, a newsletter for the Bally Astrocade, talks about a group of computer hackers in 1980 that dropped some people's jaws. Seems that most people back then used Apples to connect to the then-popular online service *The Source*. In a chat area therein, people were comparing systems. When the Bally Users' Group announced that they were connected via a Bally, a rigged-up keyboard and modem, the others thought it impossible to connect such a toy. Little has changed since then. Tell someone that you use a Commodore 128 to access the Internet, and the remark will either be, "A what?"

or "Impossible!" So go get the software and hardware needed to connect your classic boxes to the Internet. It takes some work, but you will thank yourself later (plus people's blank stares provide great amusement). -- AT

Adam's Magic Machine

by Chris Federico

On the Western stretch of Montgomery Avenue, a long, heavy-traffic road cutting neatly through Albuquerque's pleasant Northeast Heights, sits a large apartment complex with a pool and a playground. The units are roomy and quite nice for not costing an arm and a leg. Inside one of these apartments, Adam Trionfo, author, programmer, poet and collector of the classics, has crammed into the corners a large, multi-unit machine that never fails to astound me.

He can often be seen on the playground goofing around with his son Dominic, or jumping around to the music of a punk band at a bar, or out at a coffee house with his laptop, devising an article or some code. But these typical social excursions only serve to fool people into forgetting that this is a devious wizard who harbors an ominous network of electronic units that can do anything.

Want a Vic-20 game to run on a Timex Sinclair? Wondering what a 2600 emulator plays like when run through an Apple IIe and displayed on the GameBoy screen? Thinking of 'porting a hand-held game onto your ColecoVision via an international modem connection? Adam can figure out how to hook everything up to do it. It always impresses me when he gets it in his head to do things like this. The Magic Machine is the answer to all modern problems of standardization. MicroSoft should just call up Adam when they're having a problem. (Sure, they might have to get an Astrocade at some point...) -- CF

PITFALL UPDATE

The End of the Secret Level!

by us guys again

Okay, is everyone sick of *Pitfall* articles yet?

This one couldn't be avoided. We promise. This is vital information here, man.

We mentioned last issue that the Atari 5200 and 8-bit versions of *Pitfall II* contain a secret level, encountered upon winning the game proper. This area, called the Great Cavern, is insanely difficult and contains many hazards and bad guys that aren't in the game everyone's already familiar with.

Well, a month after our discovery of the Great Cavern and over a period of four hours, working together, Adam and I finally beat that tough hidden game. The ending is extremely neat, and must be reported.

Taking turns at the Atari 130XE, we sent poor Pitfall Harry wandering around the huge hidden area until we knew what our new goals were: a stranded cowboy-type, a coiled rope, a treasure chest and a key.

The problem was, we always spotted these items from a platform above or below; the routes to reach them are extremely tricky. This bonus game is a lot bigger and more complicated than the actual *Pitfall II*, requiring more route planning. We actually found ourselves wishing we'd mapped it from the beginning.

We finally got all of the items except the rope. At one point, we were surprised to find that rescuing the cowboy caused a snake charmer to appear on a screen near the edge of the area. Upon entering this screen, the charmer's message scrolled

across the bottom: "Charming the golden rope is Pitfall Harry's only hope." Grabbing the treasure chest caused it to appear on this screen as well, near the charmer, and at that point we realized that it was actually a basket.

Our theory is that the cowboy was the charmer in disguise, waiting for a good-Samaritan-type act from Harry before revealing himself and helping Harry escape the caverns. Because it became evident that that's the purpose of the bonus game: to get the hell out, now that the niece, cat and diamond ring have been rescued.

Weird, huh? So we had to find the rope. We located the necessary route at the top of the area, but it turned out to be the most difficult run of *Pitfall* screens we'd ever undertaken. We took turns for the better part of an hour, trying to get to this damn rope. We eventually realized who was better at what types of obstacles, and split up the game play appropriately.

We finally got the rope, but nothing happened! We embarked on another quest to re-locate the snake charmer. This took about half an hour. We finally found him again, and we noticed the end of the rope sticking out of the basket. But nothing else was happening!

I'll let Adam tell the last part of the story. It's cool. -- CF

So I voiced my concern right away. "I bet we need to find a flute so we can charm the rope now." Of course, in panic, this seemed quite logical. We had even thought we saw a flute earlier in the game. There was no way that we were going to stop playing now. We had come too far, played too long. We were determined to beat this game. Fortunately, we remembered that we'd initially thought that the **key**

looked like a flute, so that base was covered. No flute to hunt for.

I had not been this excited about a game in years. Playing as many games as I do, it doesn't take long before the mediocre games begin to blend together. *Pitfall*, after all these years, had me excited and sincerely glad to be playing games again.

So there we were, waiting for something to happen, when I thought I would see if the snake charmer had any other helpful hints. When Harry approached him, the flute began to play and the rope began to slowly rise out of the basket. My jaw dropped to the floor. What was happening? Was this the end of the game? Was there really going to be more to the actual finale of the whole thing than Harry jumping around like he does at the end of the actual *Pitfall II*?

As the magical rope ascended toward the top of the cavern, Harry was followed up out of the basket by his niece Rhonda, his cowardly cat Quickclaw, and the giant diamond ring -- all dangling at different heights along the rope, which continued to extend upward until a hole appeared in the cavern's ceiling, through which Harry and the rest climbed to freedom in the jungle world.

At the end, by the way, the player is informed onscreen that the Atari version is in fact the *Adventurer's Edition*, and that this particular 'port was done in 1984 by a programmer named Mike Lorenzen. Whether or not David Crane himself had anything to do with the secret level is not known.

On the plain above, along with his rescues and treasures, Harry bathed at last in the sunlight that had taken him and me over a decade to reach together. I feel fortunate to be one of the few to have fully experienced the best 8-bit graphic adventure ever created. -- AT

THE OC&GS REVIEW PANEL

This issue, we have two groups of commentary. The first comprises stories yanked from memory about 2600 games, and brief reviews. The second is a ColecoVision section, dealing specifically with Roller Controller titles.

ROBOT TANK -- My Commodore 1541 disk drive finally let out its last gasp when I was a Junior in high school (1989). This made the use of my Commodore 128 impossible, so I sold it to a friend of mine for a couple of hundred bucks. My Commodore had been my game machine for years; now I was gameless. I didn't have any other systems. Even my Atari VCS had been sold by my mother a couple of years earlier at a yard sale. What was I to do? Get a game system, and quick!

The guy who had bought my 128 had put his VCS on hold, now having so many games to play on the superior 128. I bought his VCS with about thirty-five cartridges for a song and dance. Just about every game I had always wanted was in that deal. I was overjoyed.

At the time, I used to play Nintendo all night with a friend of mine named Chris Lammert. One night, I spent the night at his house and we played Atari all night instead. He had the driving controllers for *Indy 500*, so we played that for a very long time -- it was great fun.

Then we plugged in another game, one by Activision: *Robot Tank*. I had played it before -- after all, it was my cartridge -- but this time was different. You have to picture the situation: We had just been playing *Indy 500*, which is fun, but hardly worthy of great praise for graphic glory. Now we were

looking at *Robot Tank*, the full-color, all-out best of Activision's graphic efforts on the 2600. But it was more than that.

It was my turn. I played for a while and got hit by an enemy bullet, but I didn't lose my tank. Instead I was having trouble turning, and lights were flashing on my console. Huh? I wasn't used to this. If you get hit, you are supposed to die; yet I kept playing. Shortly thereafter, I did die; but not before taking out just a few more tanks with my own crippled vehicle. Those tanks that I destroyed while mine was hobbling around with broken treads gave me a feeling of triumph that I had felt little in all my gaming experience up to that point.

After a while, Chris and I determined that the four letters on the tank's display stood for Treads, Radar, View and Cannon. The game was great fun to play with a tank that had all of those features individually defined, but the real fun came when the damage started accumulating. Could we lose all of the abilities at once and still make an effort to destroy enemies?

Eventually we were in control of a tank that was slowly crawling about with broken treads, no radar, a view that was flickering in and out of focus and a cannon that seemed to have a mind of its own. Could we possibly get off a shot in near-blindness that would add just one more to our tally of kills? A tank came toward us, firing; we knew that one more shot, no matter how minor, was our doom. We fired at that incoming tank and screamed with delight when the sounds of its explosion reached our ears. To us, it was a hard-earned victory, a testament to our skill at Activision's best action game. We never would have called that shot "luck," but now, well, now I know for **sure** that it was pure skill... -- AT

ROBOT TANK -- Yeah, Adam. You're absolutely right. Pure skill. Really.

By the age of 11, I'd been severely impressed with first-person quarter-biters like *Battlezone* and *Red Baron*. Like anyone with reasonable experience with the 2600 who observed differences between its titles and their coin-op counterparts, I assumed that any good windshield-view contest at home was technically out of reach. *Star Raiders* was basically just a well-animated star field with a graphically independent target-shoot going on in the foreground. I found out later, of course, that the 8-bit version was much more intriguing, but that's besides the point.

I saw a screen shot of *Robot Tank* somewhere. My first response was to be amazed at the graphics. I shrugged it off, though; the green-and-gray-striped ground couldn't possibly scroll with the 3-D manner in which it was drawn. I loved the 2600, but I was realistic about its limitations, which allowed me to enjoy games on their own merits and only disown those that didn't appeal to me on the primal level that defines any excellent classic. I figured that the ground just appeared stationary as your tank supposedly moved around. Another target-shoot.

At least a year later, one of my friends brought the game over. I can't remember who, but he let me borrow it. Sean McCormick, I think. The reason I wanted to borrow it was that it astonished me.

The ground did move in 3-D fashion, in fact, and smoothly. I considered it just this side of revolutionary that the player's tank bumped along with the ground, and I thought that the way the player's demise was illustrated (the melodramatic static) was innovative and unique. The sky changed from daytime to nighttime and back, complete with pretty sunset skies and several intermittent colors. The darkness was actually an aspect of difficulty and strategic readjustment, as was the fog (low visibility) and rain (slower movement). A further element of challenge to factor into

your approaches on bad guys was accumulated damage. You could lose any part of your tank's movement, weaponry or vision, and the strategy for handling each was different.

The enemy tanks actually did figure into the player's relationship with the scenery; distance and timing was important, like they were supposed to be in first-person shooters. It wasn't a mere overblown clay duck hunt. And the enemy tank explosion was the most breathtaking thing I'd seen on the VCS so far. Have you ever noticed how small the pixels are in that animation? Alan Miller packed so much into that ROM that I wouldn't be surprised to see a tiny little coin-op machine inside the cartridge if I opened it.

Added realism resulted from actual words on the screen as part of the game, just like in a coin-op: SQUADRON DEFEATED. SWITCHING TO RESERVE TANK. RAIN ALERT. A rare kind of feature in a 2600 game.

This was the first game that made me mad, made me want to hit the reset switch while bent to a demented degree on revenge. I hadn't gotten this angry at a game before; the victories were therefore triply satisfying.

The only negative comment I can make is that it gets repetitive. Well, so does *Dodge 'Em*, and yet I play it again and again. *Robot Tank* is, with little room for argument, one of the best of the best games ever released for that machine, and it still looks and feels quite amazing. And, speaking of *Dodge 'Em*... -- CF

DODGE 'EM -- Isn't it funny how your mind remembers small incidents that happened very early in your life? I usually can't remember what I had for breakfast on a given day, but I can recall silly game-related happenings with ease.

Until I got my C-64, I always played all of my games on a 13"

B&W television that I had set up on a small table in my bedroom. It was where I spent many hours conquering the evil jets in Activision's *Chopper Command* and knocking the head of the pest in U.S. Games's *Gopher*. My game collection was very limited when I was a kid, totalling a whopping six games at its peak. But the 2600 was a popular machine and all of my friends had it, so I was able to borrow many games that I would otherwise have never been able to play.

I was envious of the neighbors living across the street. They had quite a collection of carts that I didn't have. The tastes of the oldest son, John, were quite different than mine. He was one of the few who would play *Chess* on his VCS, leaving his machine on all night while it did its thinking (he was also the first person who told me that the game cheats if you wait long enough).

He had an odd game which I loved to play when I went over to his house: *Dodge 'Em*. It's fun to play alone, but it's great when there's someone on the second joystick. The game stops becoming a fight for points. Instead it becomes what the title suggests: a test of reflexes that keeps the mind racing. It is a very simple game, not holding any hidden charms whatsoever, but it's wonderful no matter how you play -- collecting points or avoiding the headlights of your buddy's oncoming car. -- AT

DODGE 'EM -- Has anyone noticed that this eat-the-dots game came out a year before *Pac-Man*?

The game works. I can't put it into better words. The feel of the game ensures its addicting grip on the player, who hits RESET over and over to try and score higher or reach a further screen.

The thing is, all the screens are the same. And yet the game is longetive; one never tires of it, after repeated games, after years. You can

find a pattern and repeat it over and over, but the game remains fresh and exciting. There's not much to look at; just that inexplicably exciting, stimulating glow of arcade purple, forming anticipatorily science-fiction-like lines and corners.

I think it's that fire button. That might be what does it for me. Press it, and you go really fast. It feels great.

Some games you just can't put into words. -- CF

And now we'll take a look at a couple of Roller-Controller-exclusive ColecoVision titles. Just the fact that they necessitate that rarely-found controller means that they're seldom played by the casual classic gaming enthusiast, so we thought that descriptions from a couple of fanatics like us might be of interest.

SLITHER -- Every summer, I would visit my father in New York for about a month. The first week or two, it was always a blast doing stuff with him; but eventually, the newness of staying with Pop would wear off and I would find other things to occupy my time. Most of the time, this meant playing Atari in my stepbrother Chris's room. But even this wore thin after a short while, as Chris had only five or six games.

A few houses down from my father lived a kid about the same age as I (twelve). His name was Raymond. We spent most of our time swimming in his pool because summer is always just about hot enough in New York to melt your skin off. Sometimes, though, we would go inside and play Atari in his dark basement. One summer we went down there to play, but instead I got caught up in his new game system, the ColecoVision.

Raymond didn't have many games; I can remember only three: *Smurf*, *Rocky* and *Slither*. I thought

Smurf was fun, *Rocky* had the best graphics ever, and *Slither* was out of this world. It was the Roller Controller that did it for me. *Slither* was the first experience with an alternative controller that I had ever had; I loved it! I remember the game being one of the best I ever played as a kid. That proves that my memory is a bit colored by nostalgia.

Slither isn't a bad game, but it is an easy game. What it boils down to is a complete knock-off of *Centipede* with an added gimmick. The gimmick is that the player is allowed free movement over the entire screen, which, in theory, makes the game more fun to play. In practice, this theory is blown apart because *Slither* doesn't give the player any restrictions that make the game the least bit complicated. Not only is the player allowed to move anywhere on the screen, but he can fire either upward or downward. This ease of play aims the game directly at children. Unless the game is begun at the most difficult level, adults will find little fun here.

As the Roller Controller pack-in game, *Slither* succeeds in showing what the device is meant for. As a game to be played on its own merits, I can only compare *Slither* to one other ColecoVision game -- *Dr. Seuss's Fix Up the Mix-Up*. Both are fun, but that fun is only witnessed by those under eight. For a game that is fun to play, is aimed at people over ten, can use the Roller Controller (in joystick mode) and is played on the ColecoVision, there is only one alternative to *Slither* -- AtariSoft's *Centipede*. -- AT

SLITHER -- This looked like a great idea when Adam first showed it to me. It still stands **conceptually** as the best *Centipede* clone I've ever seen. You can go to the top of the screen and flip the playfield upside-down, so to speak, by firing downward at everything instead of upward. And the splitting snakes are a logical upgrade of the segmented centipede; soon, little snakes are all

over the place, making you dash around manically, trying to separate the dangerous creatures from the harmlessly roving ones; and their unpredictability adds to the game's enjoyment as you try to second-guess their directions. The baby snakes are a neat addition -- shoot the tiny buggers and get a new group of big snakes. The background graphics are also pretty advanced for a 1983 ROM.

But we do have a couple of problems here. The collision detection isn't great. On the faster levels, you don't always destroy the pterodactyl when you shoot it. Fortunately, it also doesn't always destroy you when it runs into you.

The movement of everything but the snakes is also pretty jittery, and the dinosaur-looking-thing, for instance, often just leaps onto you from the border as it enters. Its jumpy movement makes it do this instantly; I don't like game obstacles that aren't avoidable. There should be an available element of evasive strategy when fast enemies are implemented; *Slither* tries to make up for its ease by putting in fast, erratic extra enemies, and it just winds up feeling confused. -- CF

VICTORY -- For some reason that I don't understand, this game also uses the Roller Controller. It might be because all four buttons are used, or because the arcade game uses a trak-ball. I really don't know. Whatever the reason, it makes the game very annoying to play.

Victory owes something to the side-scrolling game of the day -- *Defender*. But *Victory* isn't a clone of *Defender*; not at all. What *Victory* lacks in originality, it more than makes up for in odd quirks. What other game allows the use of a shield that will let you bump into the ground in such an amusing manner? I don't know of any. And it is the only game I know of in which the radar moves the player's screen area and not the landscape (I didn't

notice this until Chris pointed it out).

Victory is a game that seems unfinished. There is very little about it to indicate that much thought was put into it. It is a straightforward game that could keep you occupied if there were no other games to play at the moment. Then again, if there were some fresh paint nearby, it might be just as enjoyable to watch it dry as it is to wrestle ongoing enjoyment out of this game. -- AT

VICTORY -- This one's just a pain in the ass. I mean, it's a good idea, and when I first played it, I liked it. I liked the roto-gun idea, and it was interesting to try and wheel the thing around in the air with the Roller Controller. I also thought it was neat that you could be in either the blue sky above the *Scramble*-like terrain or in the black outer-space area above. The game should be a lot of fun.

But when I sat down to really play it, it was just a pain in the ass. I really gave it a chance, too. But you have to chase the enemies around; it doesn't seem like they're mad at you. What kind of enemies are those? And when you do find them, their shaky movement makes it tough to anticipate their routes. This should be a challenging aspect, but they jump a few screen inches to crash into you in an instant, and it seems more like incidental movement than deliberate steering.

I also don't like the idea that you can't shoot the ground-based rockets until they launch at you. This could have been a neat *Super Cobra*-like contest with free four-directional scrolling and varying sky. I've always wanted to play a game like that. Instead, it's tiresome and, on top of that, repetitive if you do succeed in reaching further levels. There are no targets on the ground to blast except the rockets, and by the time they launch, you're looking for your 2600 and *Robot Tank*. -- CF

SEeya NEXT TIME!